

REMARKS

Claims 8-14 remain in this application, and new claim 15 is added above. Claims 1-7 were previously canceled. Reconsideration of the application is requested.

The undersigned wishes to thank Examiner Shanske and his supervisor for the courtesy extended during the telephone interview conducted on December 8, 2010. A record of the substance of this interview is included in the remarks that follow.

Brief descriptions of Figures 3 and 4 of the drawings are incorporated into the substitute specification by way of the amendments above, and the objection set forth in section 1 on page 2 of the Office Action is no longer applicable.

Independent claim 8 is rejected under 35 U.S.C. § 102(a) as anticipated by European Patent Document 1 209 332 to Hahn et al. Reconsideration is requested. As argued during the interview, it is respectfully submitted that the Hahn et al. document fails to disclosed a nitrogen oxide storage catalytic converter regeneration method including, in combination with the other acts or operations specified, implementing, after a first regeneration mode, a second regeneration mode in which a variable value is provided for the air/fuel ratio such that the time rate of change of the air/fuel ratio λ_M is set as claim 8 particularly defines. The Hahn et al. document discloses a method for regenerating a nitrogen oxide storage catalytic converter (NSC) arranged in an exhaust pipe of an internal combustion engine. Lines 35-42 in column 4, lines 16-26 in column 5, and Figure 4 suggest setting a variable value for an air/fuel ratio λ_M of an air/fuel mixture burned in the engine during NSC regeneration.

As for the value for the air/fuel ratio λ_M , consideration of the exhaust transit time between the engine and the NSC is made. Since the exhaust transit time correlates to the mass flow of the exhaust gas, it is conceivable to conclude that the λ_M value depends on the latter, and also that the time rate of change $d\lambda_M/dt$ of the air/fuel ratio λ_M depends on the mass flow of the exhaust gas. Although such is not explicitly disclosed, it could possibly be concluded that the time rate of change $d\lambda_M/dt$ of the air/fuel ratio λ_M is set as a function of mass flow of the exhaust gas flowing through the NSC. Figure 4 of the Hahn et al. document shows a first regeneration phase with a constant value for λ_M (λ_{F1} ; t_A - t), and a second regeneration phase with a variable λ_M (λ_{F2} , λ_{F3} , λ_{F4} ; t_{AH} - t_E). This figure shows only constant values of λ_M , such that $d\lambda_M/dt$ is zero, and it is respectfully submitted that the invention as presently defined by claim 8 is not in fact anticipated by the Hahn et al. ('332) disclosure.

Independent claim 8 is also rejected under 35 U.S.C. § 103(a) as unpatentable over British Patent Application 2 375 059 to Guenther et al. in view of German Publication 199 15 793 to Voigtlaender et al. Reconsideration is requested. The Guenther et al. document discloses first and second regeneration modes (with corresponding constant values for λ_M), while the Voigtlaender et al. document discloses variable values for λ_M in a second regeneration mode. As also argued during the interview, neither of these documents suggests setting the corresponding rate of change $d\lambda_M/dt$ of the air/fuel ratio λ_M as a function of exhaust gas mass flow through the nitrogen oxide storage catalytic converter or as a function of an internal combustion engine operating variable linked with the mass flow of the exhaust gas. These properties are required by the limitations

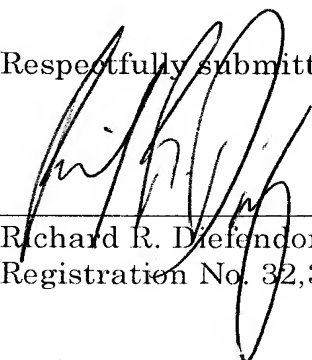
set forth in claim 8, and claim 8, therefore, is not suggested by the collective disclosures provided by the Guenther et al. and Voigtlaender et al. disclosures.

As tentatively agreed during the interview, claim 8 as it appears above should distinguish the invention from the prior art relied on, and should be patentable as a result. All other claims in this application, including new claim 15, are dependent claims and should be patentable as well. New claim 15, it should be noted, reflects certain features discussed, for example, in paragraph 0030 of the specification.

The present application, as a whole, should now be in allowable condition. If there are any questions regarding this Reply or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an extension of time sufficient to effect a timely response. Please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323, Docket No. 095309.57933US.

Respectfully submitted,



Richard R. Diefendorf
Registration No. 32,390

December 8, 2010

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
RRD:rd